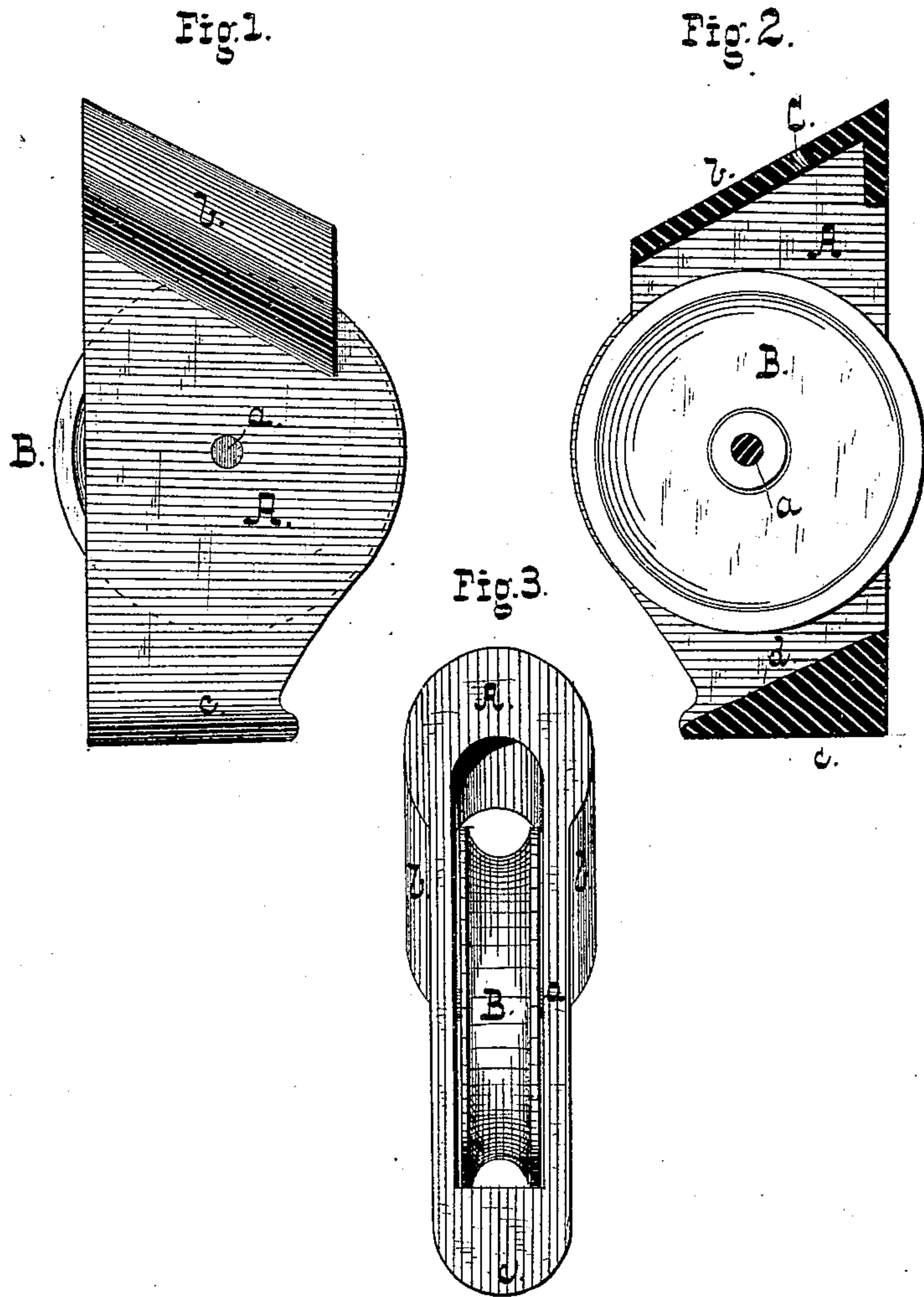


(Model.)

A. MILLAR.
SASH CORD GUIDE.

No. 249,654.

Patented Nov. 15, 1881.



WITNESSES.

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SASH-CORD GUIDE.

SPECIFICATION forming part of Letters Patent No. 249,654, dated November 15, 1881.

Application filed October 4, 1881. (Model.)

To all whom it may concern:

Be it known that I, ALEXANDER MILLAR, of Baltimore city, State of Maryland, have invented certain new and useful Improvements in Sash-Cord Guides; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation; Fig. 2, a central vertical sectional view of the device, and Fig. 3 a front elevation of the same.

My invention has reference to sash-cord guides or sash-pulleys, and it has for its object to provide a device of that class of such construction that it may be made as cheaply as, if not more cheaply than, other devices of the same sort, while being of such construction and shape that it may be inserted in a machine-made mortise, or in one which may be readily made by hand.

Various forms of sash-cord guides have been devised of late, the shapes of the casings being such that they fit accurately in corresponding mortises made by suitable machines. These devices are unexceptionable in point of cheapness and efficiency; but they are open to the objection that the mortises in which they fit are practically only to be made by the machines, as they are of such configuration that to cut them by hand would amount to a job of carving rather than of mortising. The pulleys are in consequence only salable to manufacturers who own or may be induced to purchase the peculiar mortising-machine needed. It seems to have been the intention of the inventors of the devices referred to to make them of such shape as to necessitate the use of a machine, so that the great economy which results from the insertion of the pulleys by the sash manufacturer would lead to the purchase of a machine, as well as to that of the pulleys to go in its mortises. That is not my intention. The pulley I have devised, while of such shape as to be readily inserted in a machine-made mortise, is also adapted to a mortise which can conveniently be made by hand with a bit, chisel, and mallet.

In the drawings, A is the casing, and B the sheave, mounted upon a pivot-pin, *a*, as usual. The lower edge, *c*, of the casing meets the front face substantially at right angles, and is by

preference hemi-cylindrical, being rounded from side to side. At the top is a swell, *b*, pitched downwardly and rearwardly on either side, and forming with the upper edge a cylindrical surface. The inner edge, *d*, of the base is nearly parallel with the inner side of the top, diverging slightly, however, from the same, so as to facilitate the drawing of the patterns from the sand. In the upper edge is or may be formed a perforation, *C*, for a barbed-wire tack, though this is not absolutely necessary.

To insert the device by hand a hole is bored, with an ordinary bit, of a size to fit the cylindrical part *b*, and at an angle with the face of the window-frame equal to that at which the upper edge of the casing meets the face. A second hole is bored at the proper distance below the first, of a width equal to that of the casing, and the wood between the holes is chipped out with a mallet and chisel. The swell *b* is fitted in the top or larger hole, and the casing is pushed downwardly and rearwardly until the bottom *c* abuts against the base of the mortise, when the face of the casing will necessarily be flush with the window-frame.

It will be seen that the entire weight of the sash and balance is sustained by the base of the casing, and there is no tendency, under any circumstances, to cause the casing to project from the face of the frame and in the way of the sash.

It is clear that the mortise may be cut by means of a laterally-cutting bit in either of two ways. The bit must have an enlarged portion to cut the upper hole, and a smaller section to form the rest of the mortise. It may either be made to enter the face of the casing in the axes of the swell *b* until the enlarged portion of the bit perforates the frame, when the latter is rotated about the intersection of the axes of the cylindrical ends of the mortise, or else the bit may enter from the rear and itself rotate about the same point until the mortise is cut the desired length.

The machine may be made the subject of a separate application for Letters Patent.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A sash-cord guide having at the top of its casing a cylindrical swell extending downwardly and rearwardly, as and for the purpose set forth.
- 5 2. In a sash-cord guide, a casing having at its upper end a downwardly and rearwardly pitched cylindrical swell and a rounded base, substantially at right angles to the face, as set forth.

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Witnesses:

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